

METHOD TO EFFICIENTLY GENERATE THE ROW AND COLUMN INDEX FOR  
HALF RATE INTERLEAVER IN GSM

**ABSTRACT OF THE DISCLOSURE**

[0055] A method and apparatus for interleaving bits in a first sequence is disclosed. An exemplary method comprises storing a set of offset values in at least one table, applying in order each of the set of offset values to identify an adjacent bit pair in the first sequence of the bits for a new interleaved sequence of the bits and incrementing each of the set of offset values until an upper limit is reached to further identify additional adjacent bit pairs in the first sequence of the bits for the new interleaved sequence of the bits. The table is significantly shorter, requiring less memory than that used in a conventional interleaver, particularly a GSM interleaver for half rate speech.